State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-18-83 Relating to Certification of New Motor Vehicles

VOLVO CAR CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1996 model-year Volvo Car Corporation exhaust emission control systems are certified as described below for passenger cars:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type: Gasoline

Engine Family: TVV2.4VJGKEK Displacement: 2.4 Liters (149 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Sequential Multiport Fuel Injection Heated Oxygen Sensors (Two) Three Way Catalytic Converter Secondary Air Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The TLEV certification exhaust emission standards for this engine family in grams per mile are:

Miles	Non-Methane Organic Gas	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Formaldehyde</u>	Carbon <u>Monoxide (20⁰F)</u>
50,000 100,000	0.125 0.156	3.4 4.2	0.4 0.6	0.015 0.018	10.0 n/a
Reactivi	ty Adjustment	Factor (RAF)	for NMOG Ma	ss Emission:	0.98

The certification exhaust emission values set forth for non-methane organic gas (NMOG) reflect application of a 0.98 RAF for 1996 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

Miles	Non-Methane Organic Gas	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Formaldehyde</u>	Carbon <u>Monoxide (20⁰F)</u>
50,000	0.063	0.6	0.1	0.001	1.3
100,000	0.063	0.6	0.1		n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gas (NMOG) exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.1) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines").

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this

day of August 1995.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

E.O.# A-18-83

199 6 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

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Manufacturer:	VOLVO CAR COI	RP. E	ch Eng Fam	: <u>TVV2</u>	<u>.4vJGKEK</u> Ev	ap Fam: TVVII	43AYPEA
All Eng Codes	in Eng Fam: CA	49	9 S	50S <u>×</u>	AB965		_
	Tier-l TLI						
Evap Std: 50	K Useful Lit	fe with R/	LX In	-Use Ex	ch Std: Full I	n Use <u> X </u>	t In Use
Veh Class(es)	: PC_X_LDT1_	LDT2_	MDV1	P	IDV2 MDV3_	MDV4	MDV5
	td for Multi-Clas						
Fuel Type(s):	Dedicated	Flex-Fuel_	Dual-	Fuel	Bi-Fuel	Gasoline <u>X</u>	Diesel
	CNG LNG	LPG	M85 0	ther (s	pecify)		
Firs Test Fu	el(s): Indo	Ph2_X(CNG LP	'GM	185 Other	(specify)	
•	Diesel:	13 CCR 2	282	40 CF	R 86.113-90	40 CFR 8	6.113-94
ervice Accum	: Std AMA <u>X</u> i	Mod AMA	Mfr A	DP	Other (specif	у)	
NMOG Test Pro	cedure: N/A	StdX	Equiv_	F	R/L Test Proc:	SHEDF	t Source X
L id: Type	A B C,	APU Cyc	le (e.g.,	Otto, [Diesel, Turbine):	
Engine Config	uration: 1-5	Displace	ment: <u>2.</u>	4 /	Liters <u>14</u>	9 /	Cubic Inches
Valves per Cy	linder: 4		Rated	HP:	168	e <u>6100</u>	RPM.
Engine: From	Valves per Cylinder: 4 Rated HP: 168 @ 6100 RPM Engine: Front X Mid Rear Drive: FWD X RWD 4WD-FT 4WD-PT						
	e.g., MFI, EGR,						
			/ (us	se abbro	eviatións per S	AE J1930 SE	P91)
	Vehicle Models	Trans.	ETW	DPA	Ignition	EGR	Catalytic
(also list	(if coded see	(M5, A4	Or Tost Wt		(ĚCM/PCM) Part No.	System Part No.	Converter Part No.
TA55:2(50)	attachment)	etc.)	TESC NC.		0261203077		9 146 685
17,55.2(214)	650	7.4			0261203017	WA	
	!		3500	7.1			
							1
i			3625	6.2		•	
			0623	0.2			
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Date Issued:

Revisions: